FIG. 1

P-values vs. vehicle

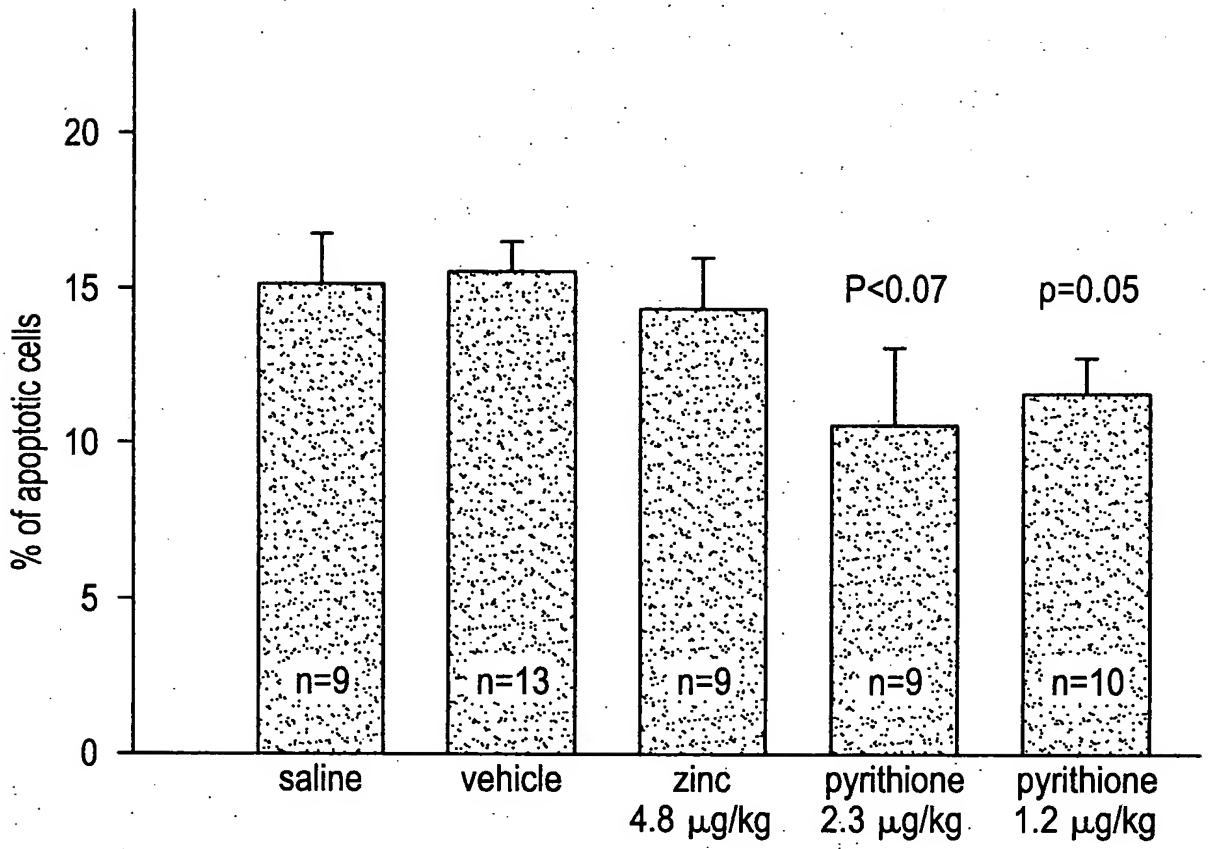
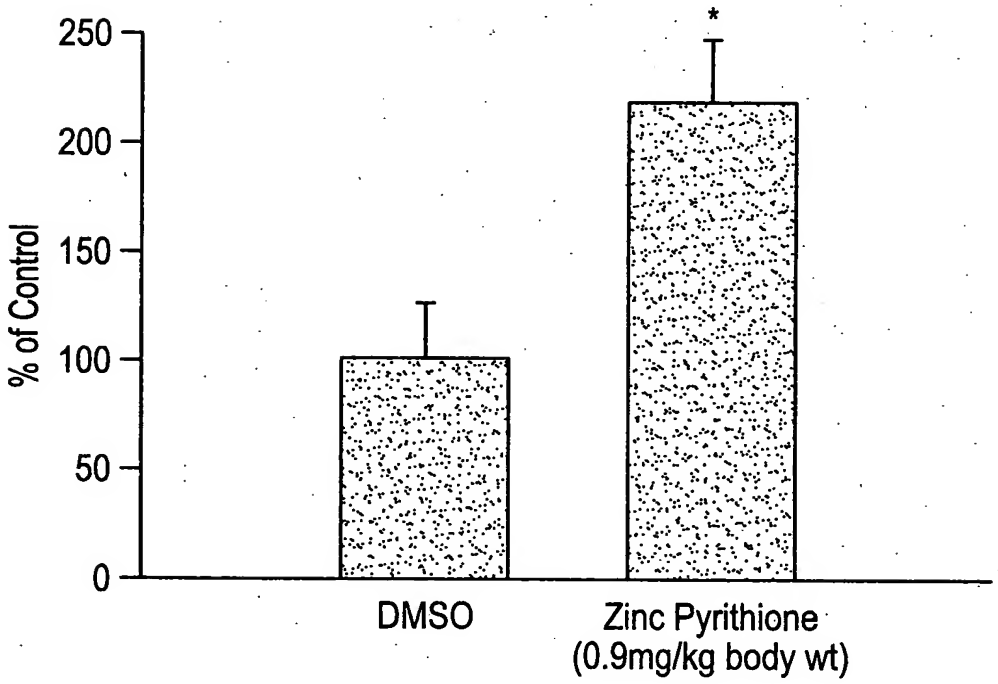


FIG. 2

Effects of Zinc Pyrithione on HSP-70 in heart

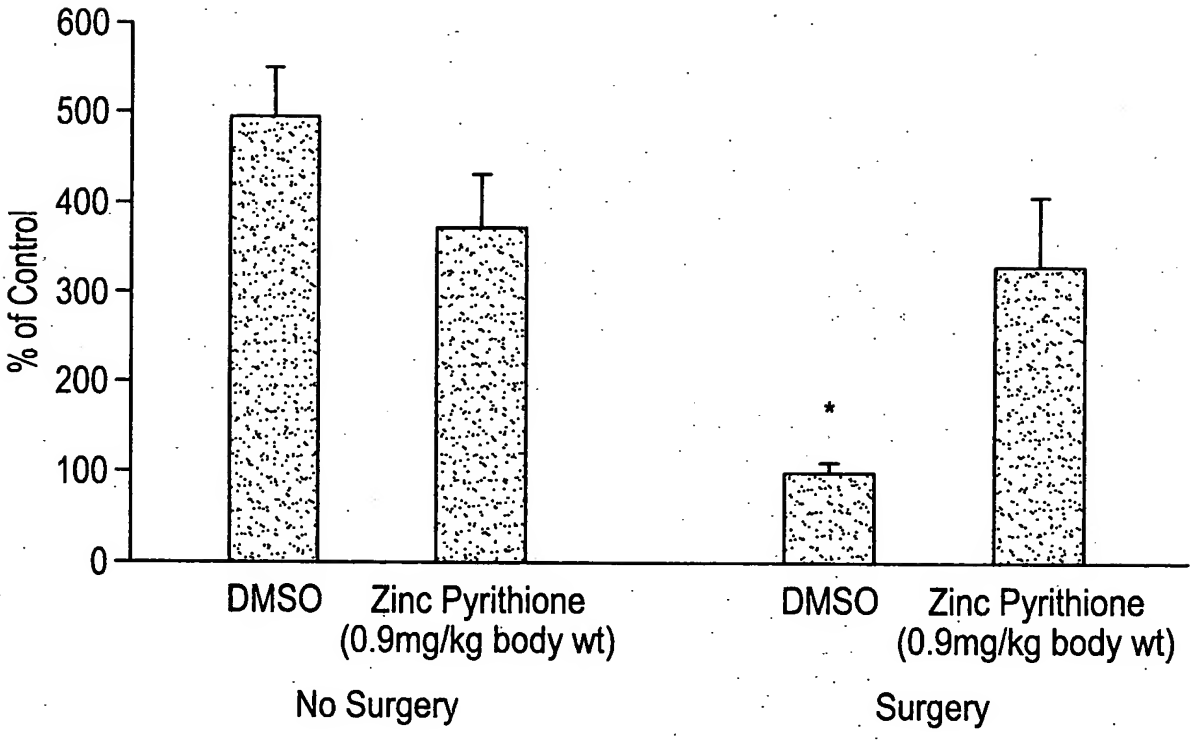


n=8-9

*p<0.01 vs DMSO

FIG. 3

Effects of Zinc Pyrithione on SP1 in Brain



n=3-6

*p<0.01

FIG. 4

Effects of zinc pyrithione on kainic acid induced damage in rat brain areas

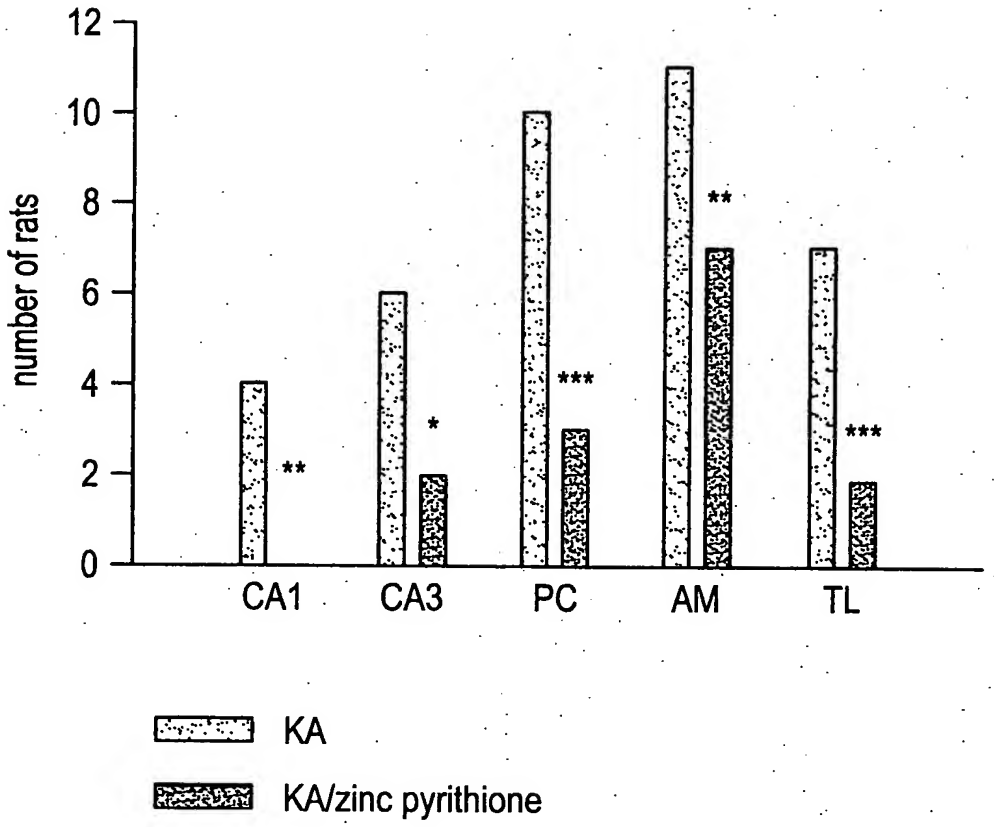


FIG. 5

Effects zinc pyrithione on the severity of kainic acid induced seizures in rats

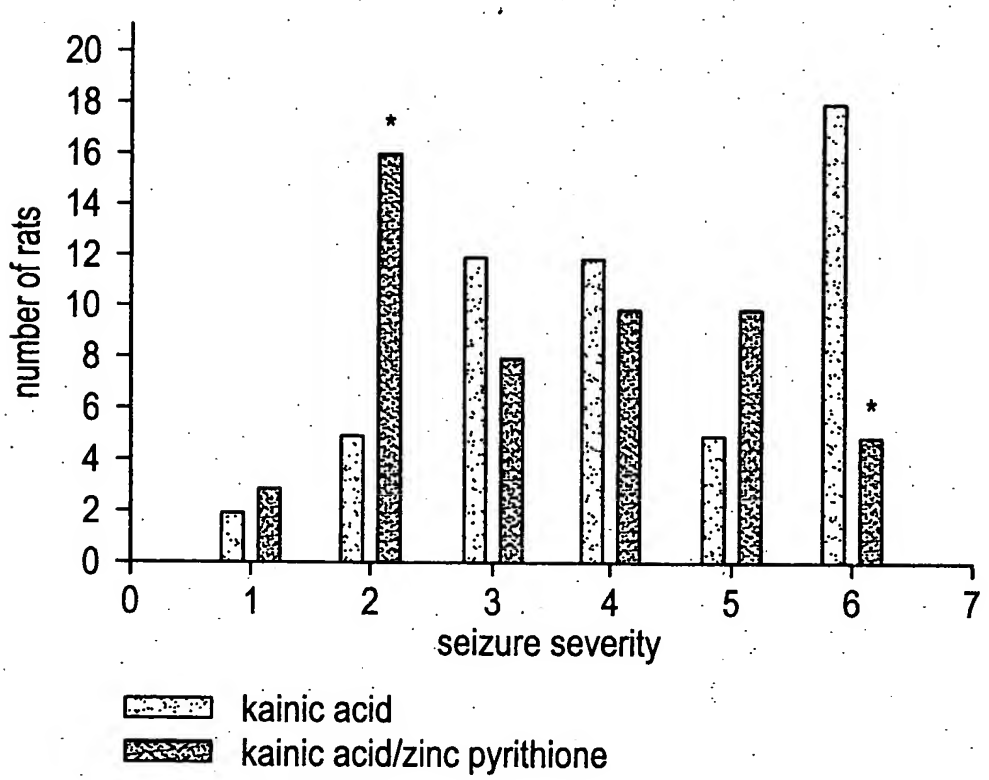


FIG. 6

PROTECTIVE EFFECT OF ZINC PYRITHIONE IN PC12 CELLS
SUBJECTED TO OXIDATIVE STRESS

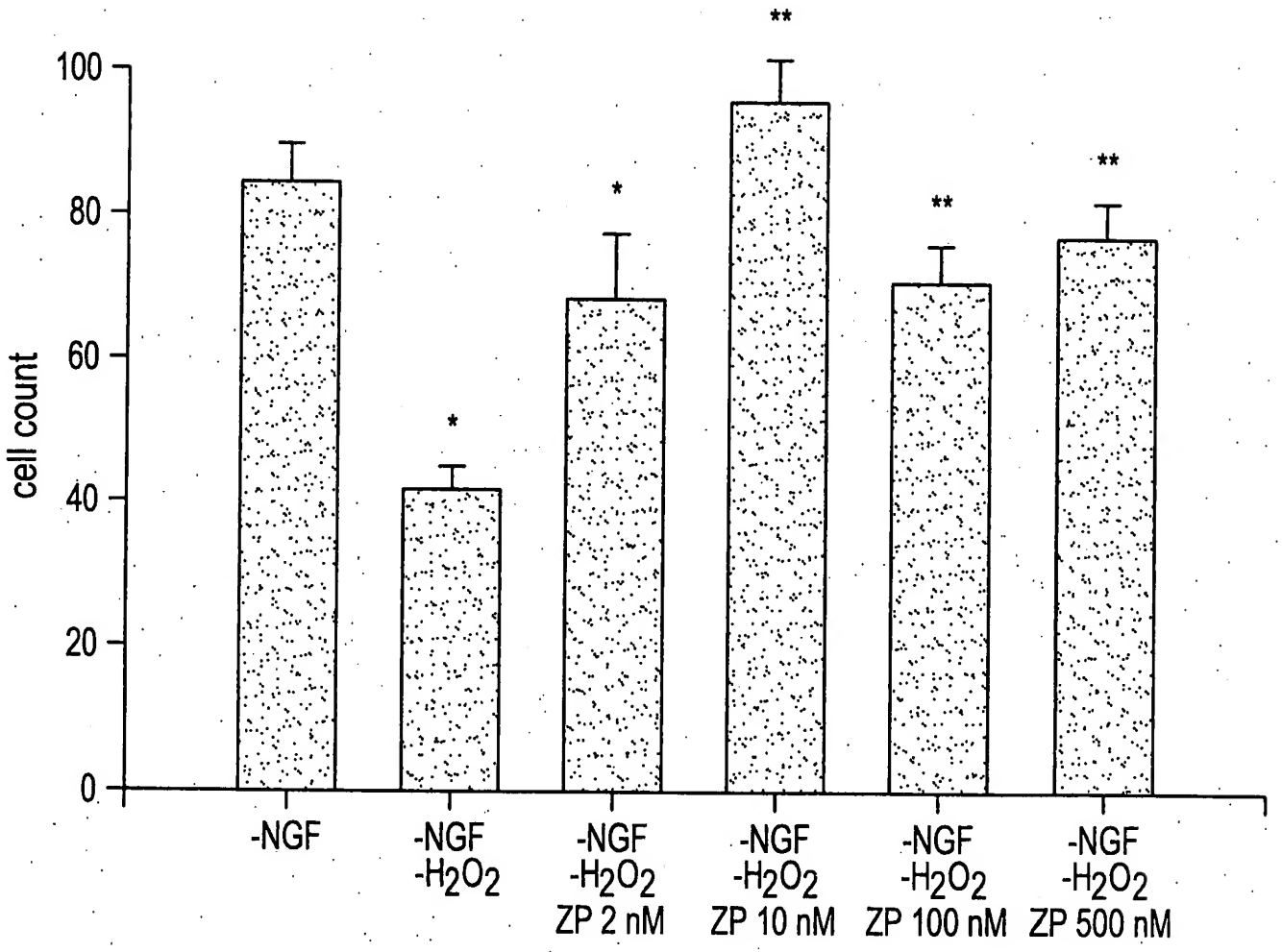


FIG. 7

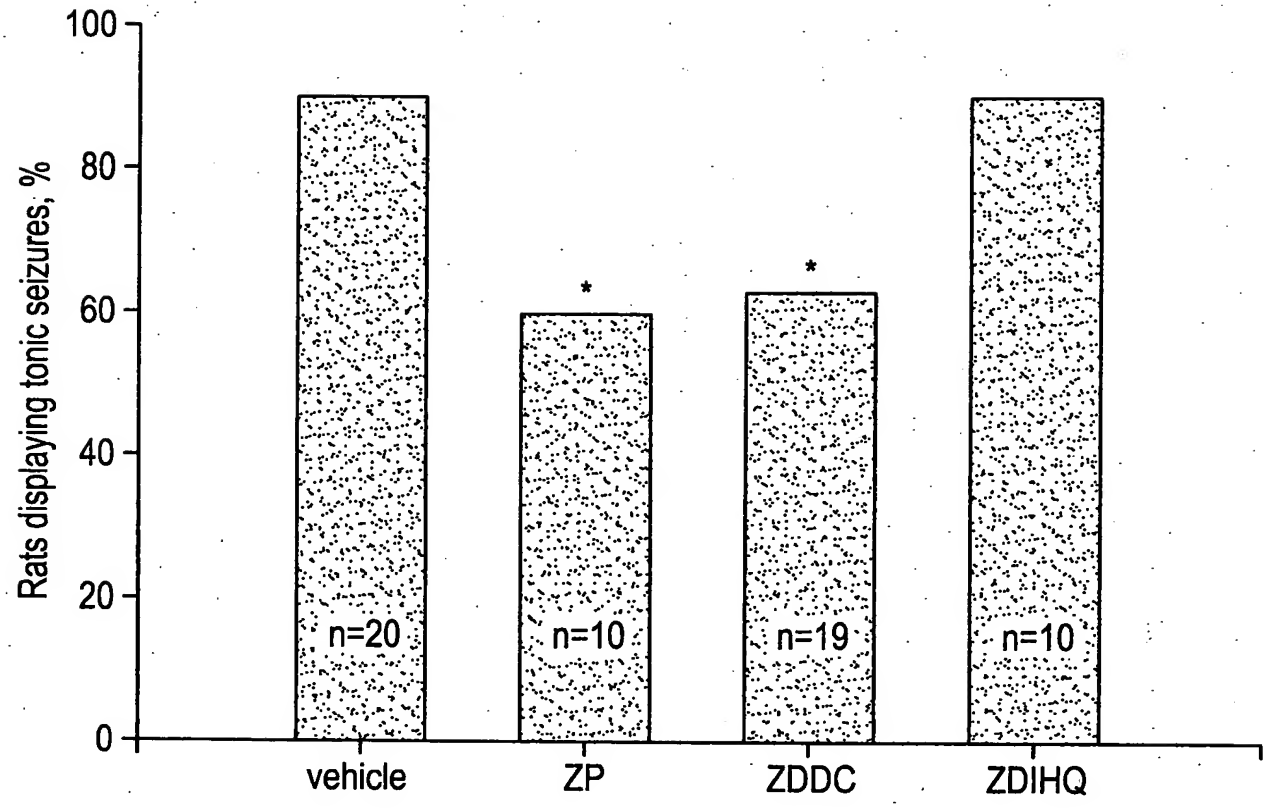

Rats displaying tonic seizures, %
100
80
60
40
20
0
n=20
n=10
n=19
n=10
*
*
vehicle
ZP
ZDDC
ZDIHQ

FIG. 8

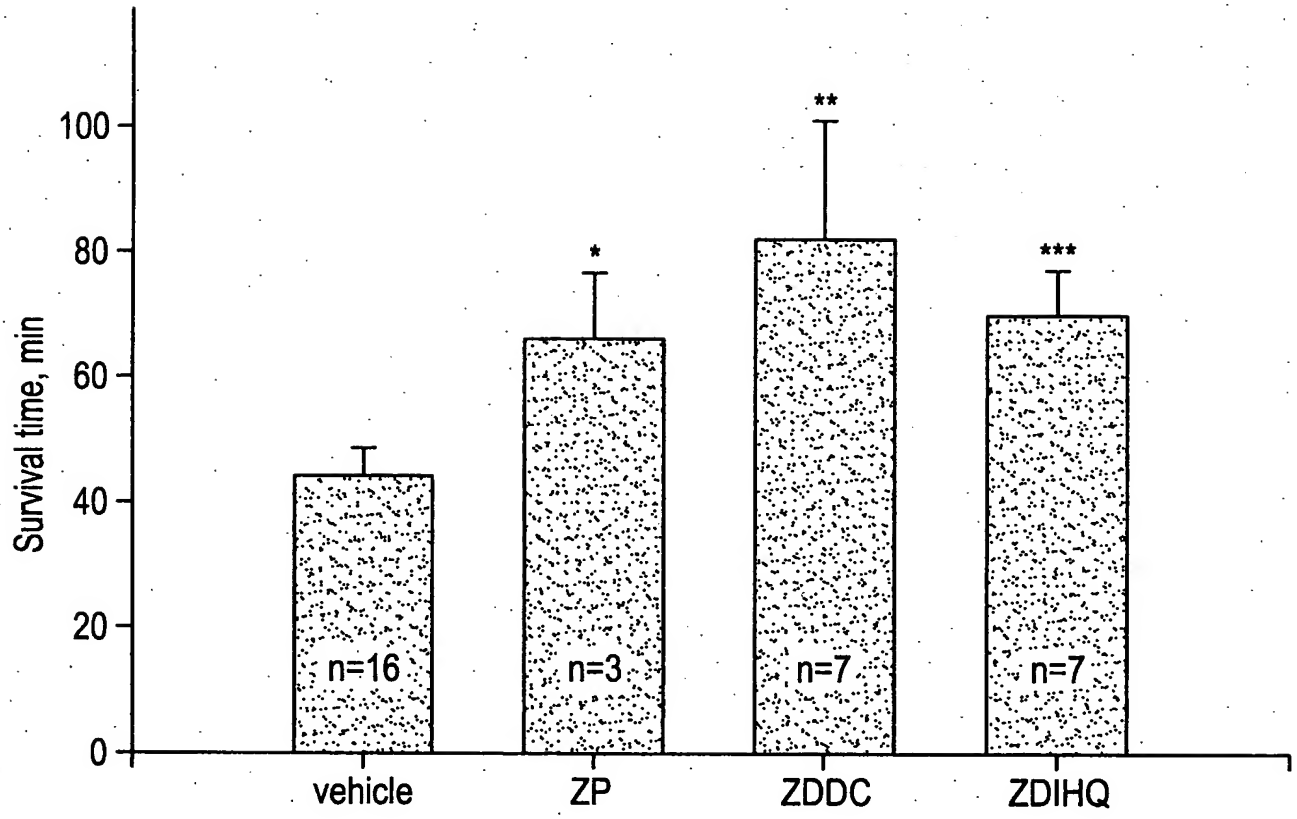

Survival time, min
100
80
60
40
20
0
**
*
***
n=16
n=3
n=7
n=7
vehicle
ZP
ZDDC
ZDIHQ

FIG. 9

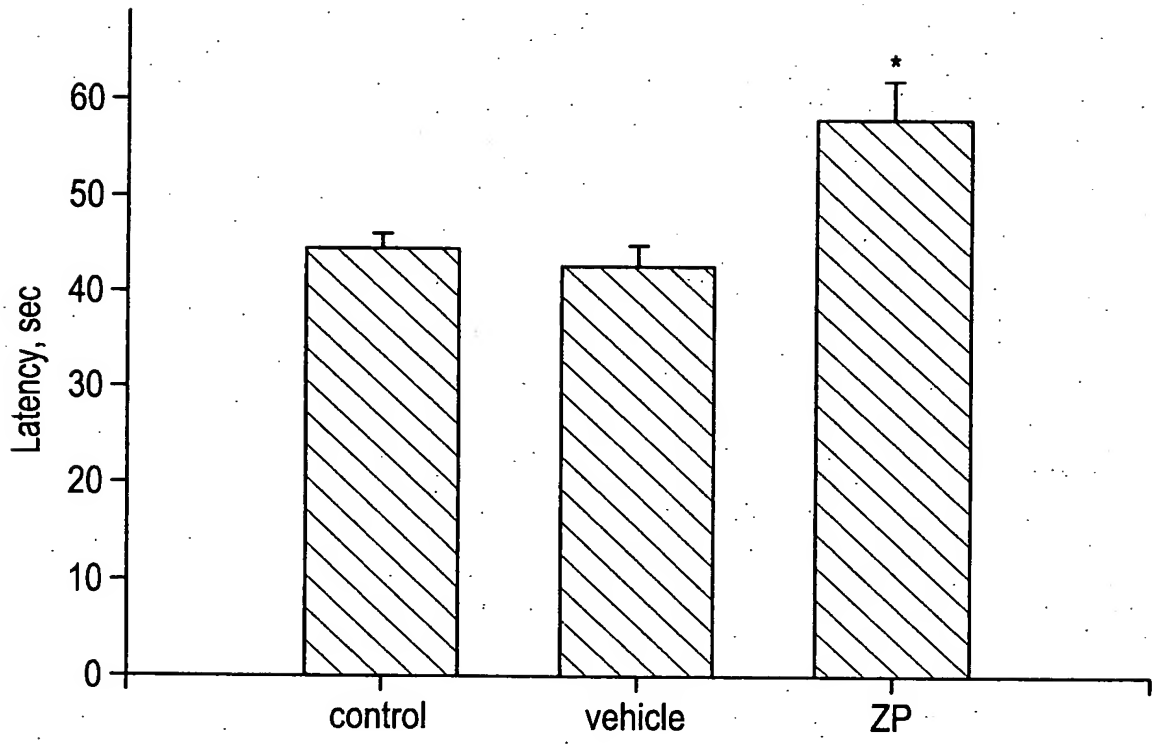


FIG. 10

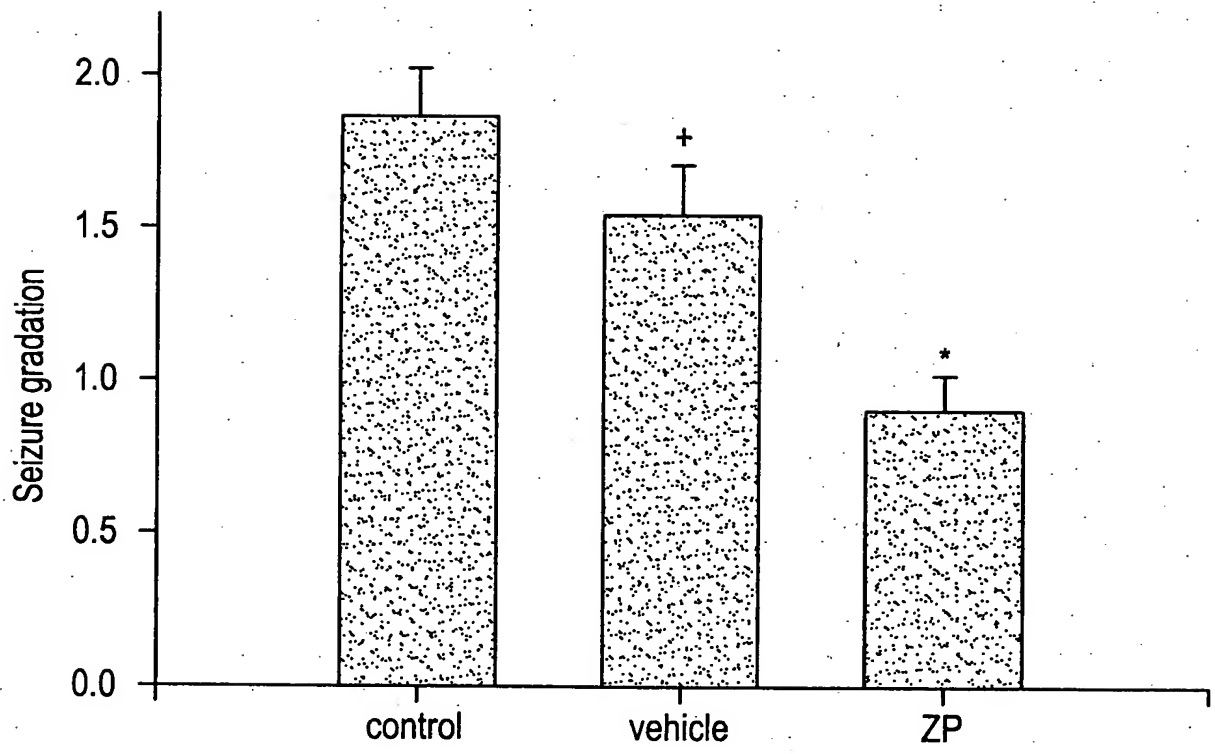


FIG. 11

PROTECTIVE EFFECTS OF ZINC PYRITHIONE IN PC12 CELLS

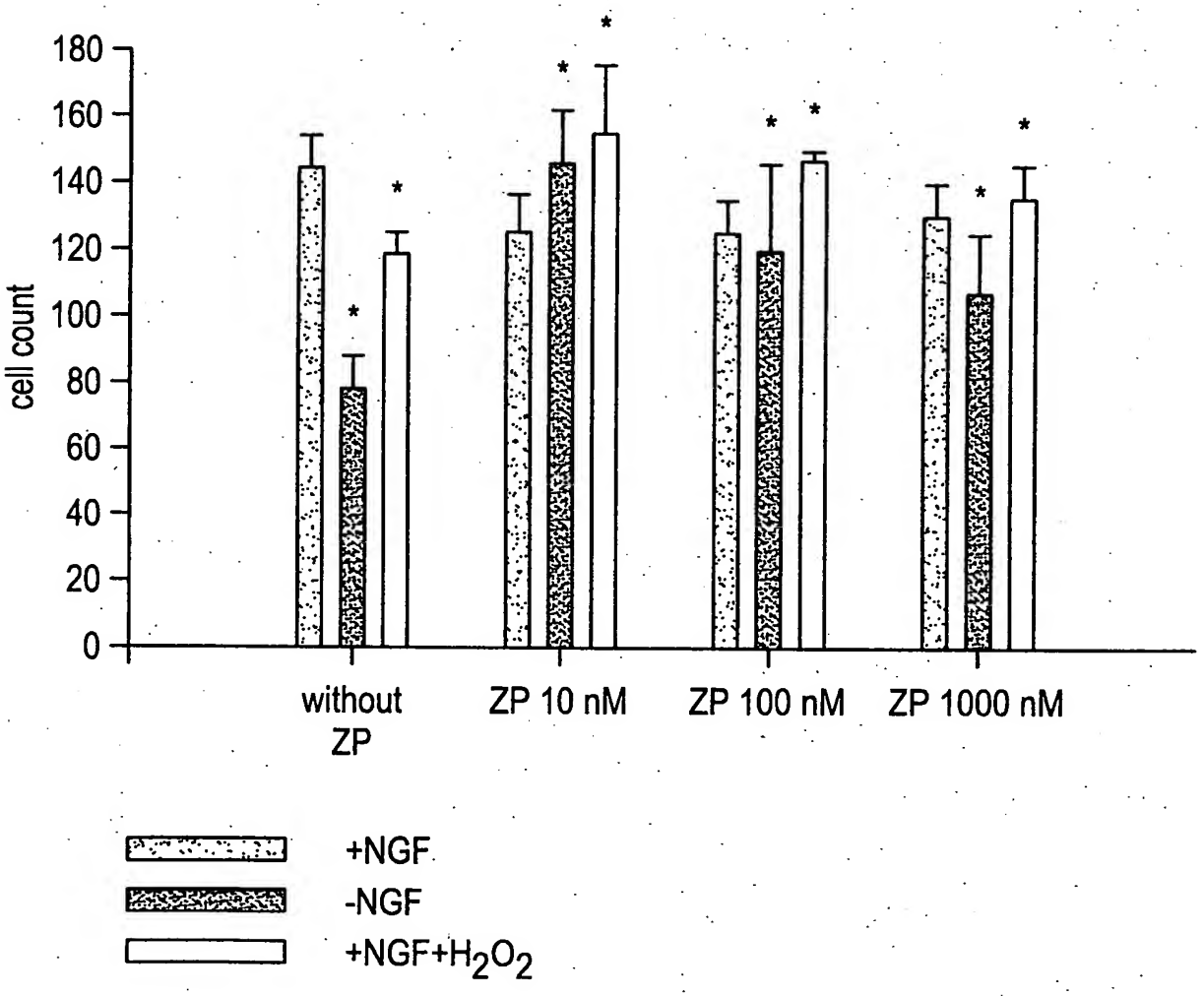


FIG. 12

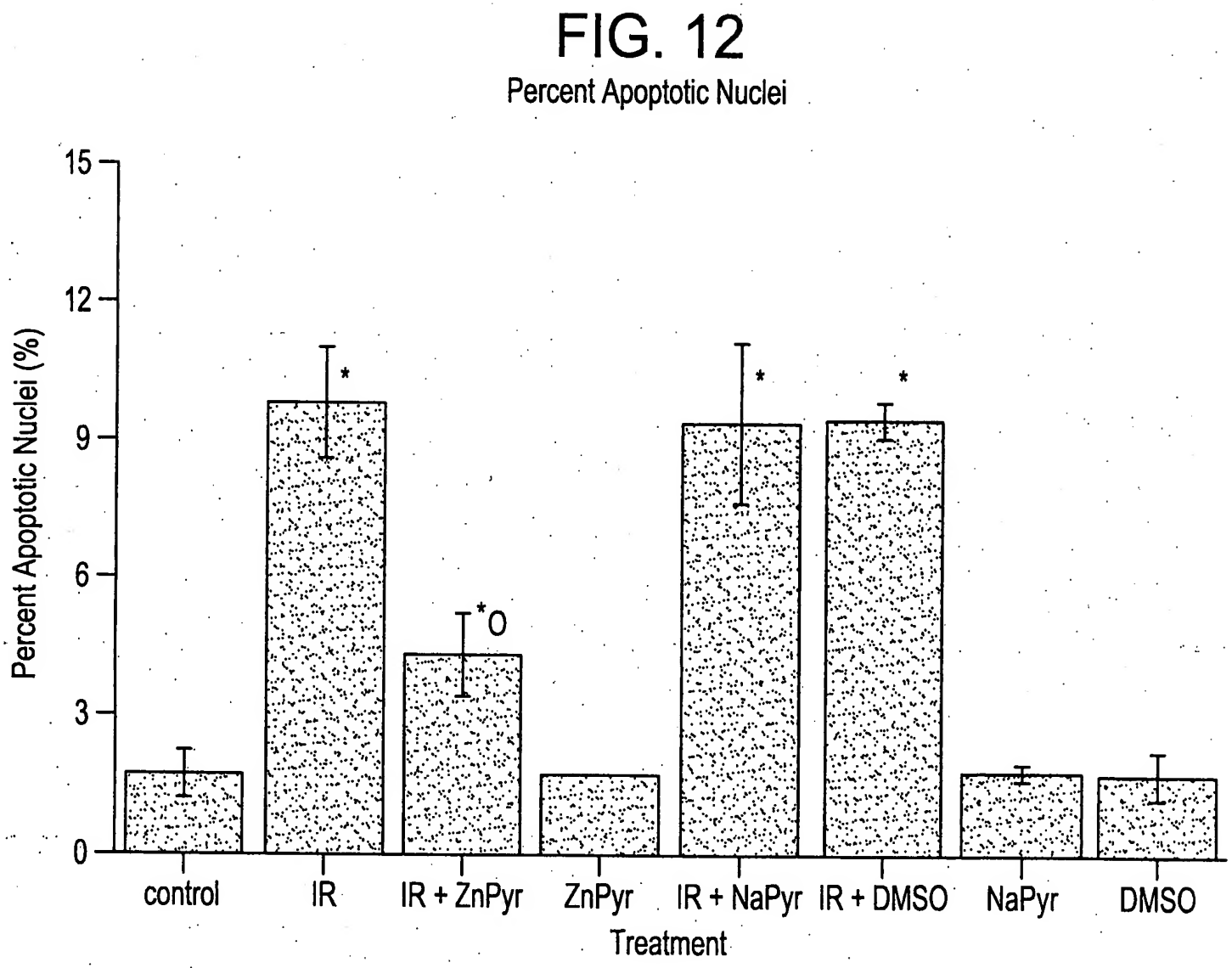

Percent Apoptotic Nuclei
Percent Apoptotic Nuclei (%)
15
12
9
6
3
0
*
*
*O
*
*
control
IR
IR + ZnPyr
ZnPyr
IR + NaPyr
IR + DMSO
NaPyr
DMSO
Treatment

FIG. 13

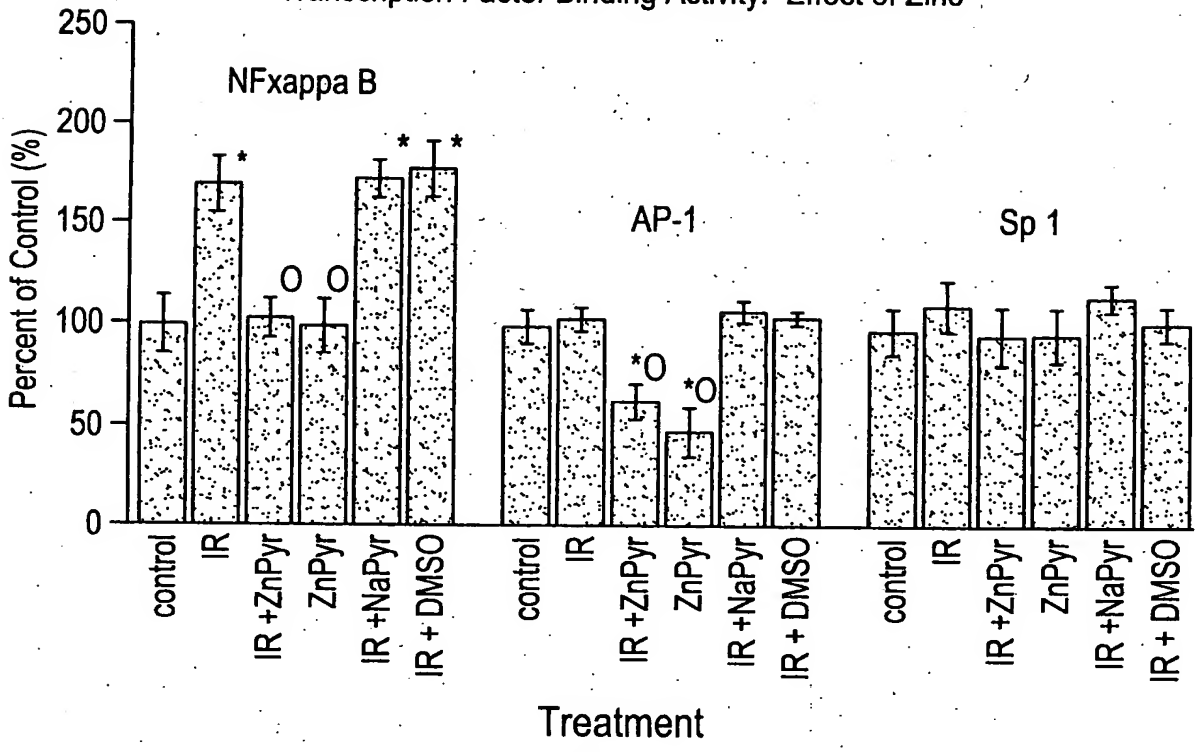

Transcription Factor Binding Activity: Effect of Zinc
NFxappa B
AP-1
Sp 1
Percent of Control (%)
250
200
150
100
50
0
control
IR
IR +ZnPyr
ZnPyr
IR +NaPyr
IR + DMSO
Treatment

FIG. 14

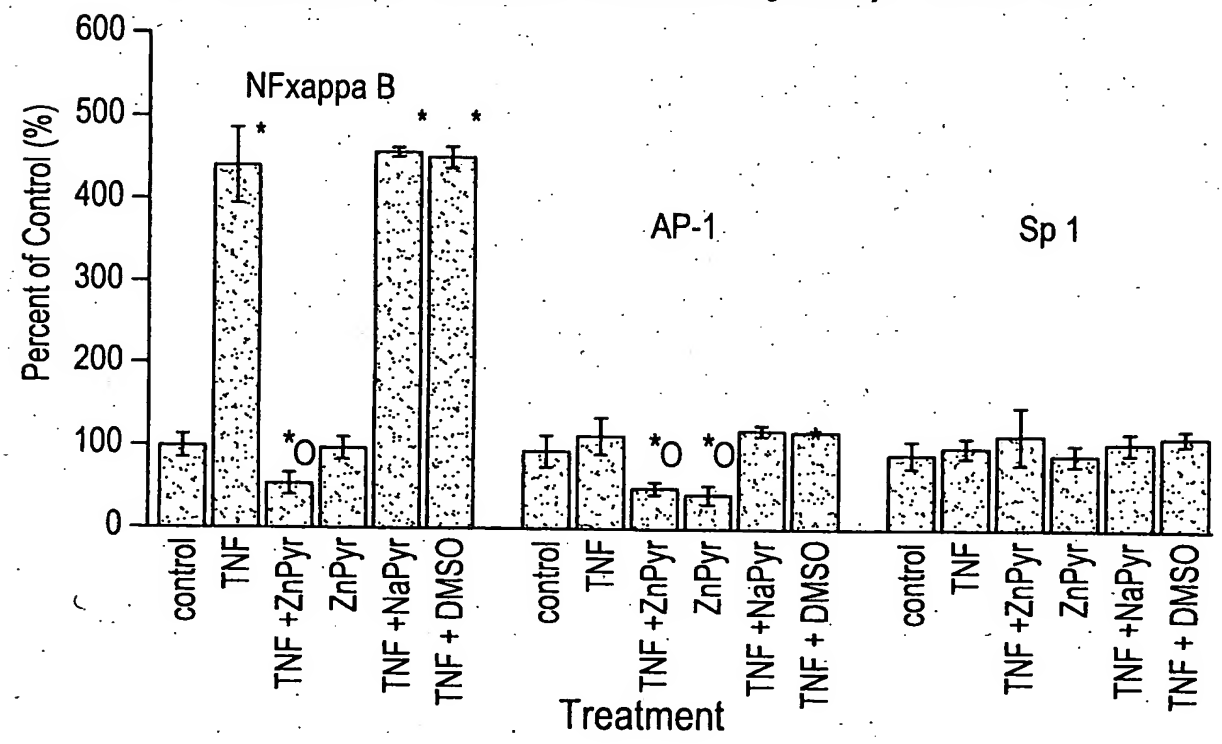

TNF alpha-induced Transcription Factor Binding Activity: Effect of Zinc
NFxappa B
AP-1
Sp 1
Percent of Control (%)
600
500
400
300
200
100
0
control
TNF
TNF +ZnPyr
ZnPyr
TNF +NaPyr
TNF + DMSO
Treatment

FIG. 15

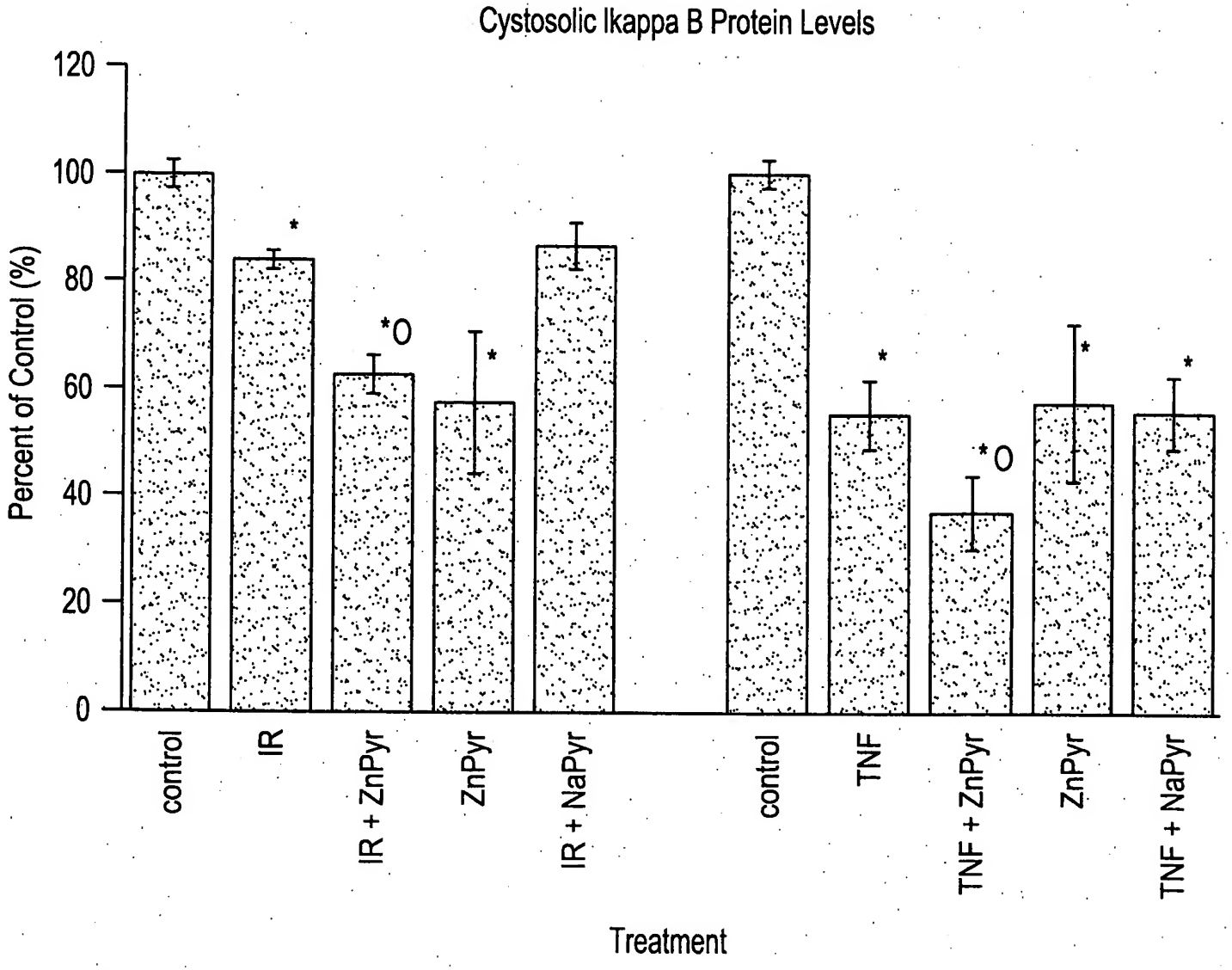

Cystosolic Ikappa B Protein Levels
Percent of Control (%)
120
100
80
60
40
20
0
control
IR
IR + ZnPyr
ZnPyr
IR + NaPyr
control
TNF
TNF + ZnPyr
ZnPyr
TNF + NaPyr
Treatment

FIG. 16A

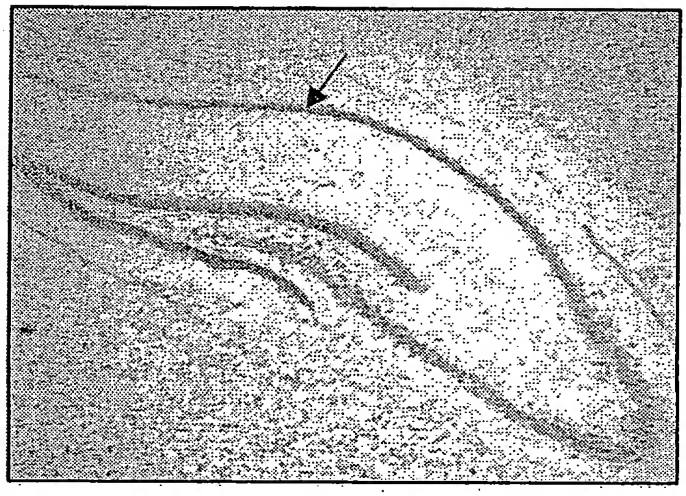


FIG. 16B

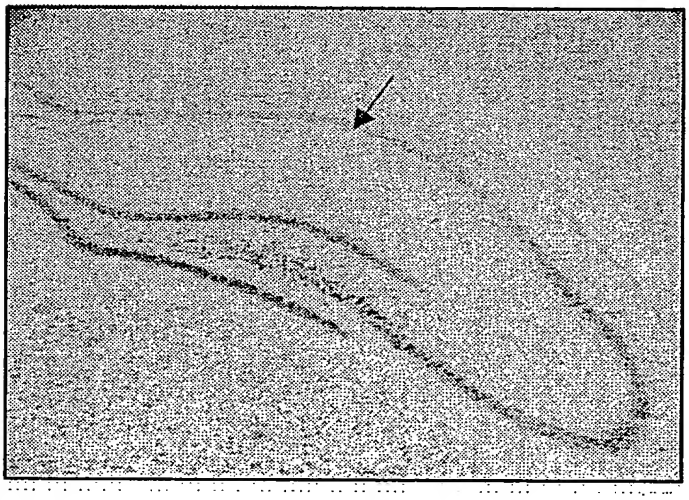


FIG. 16C

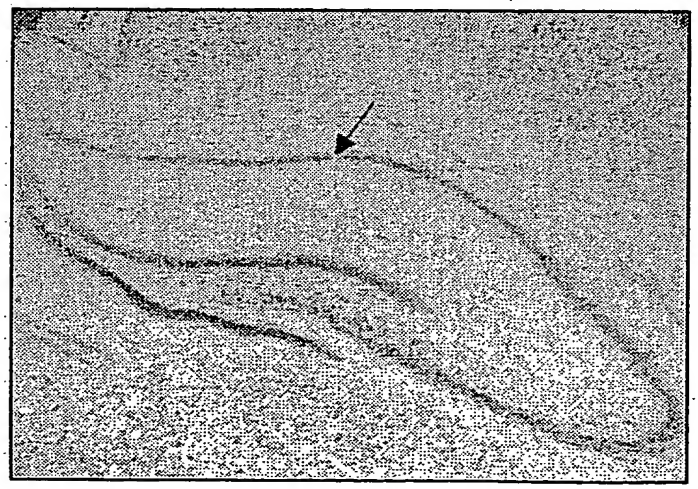


FIG. 17A

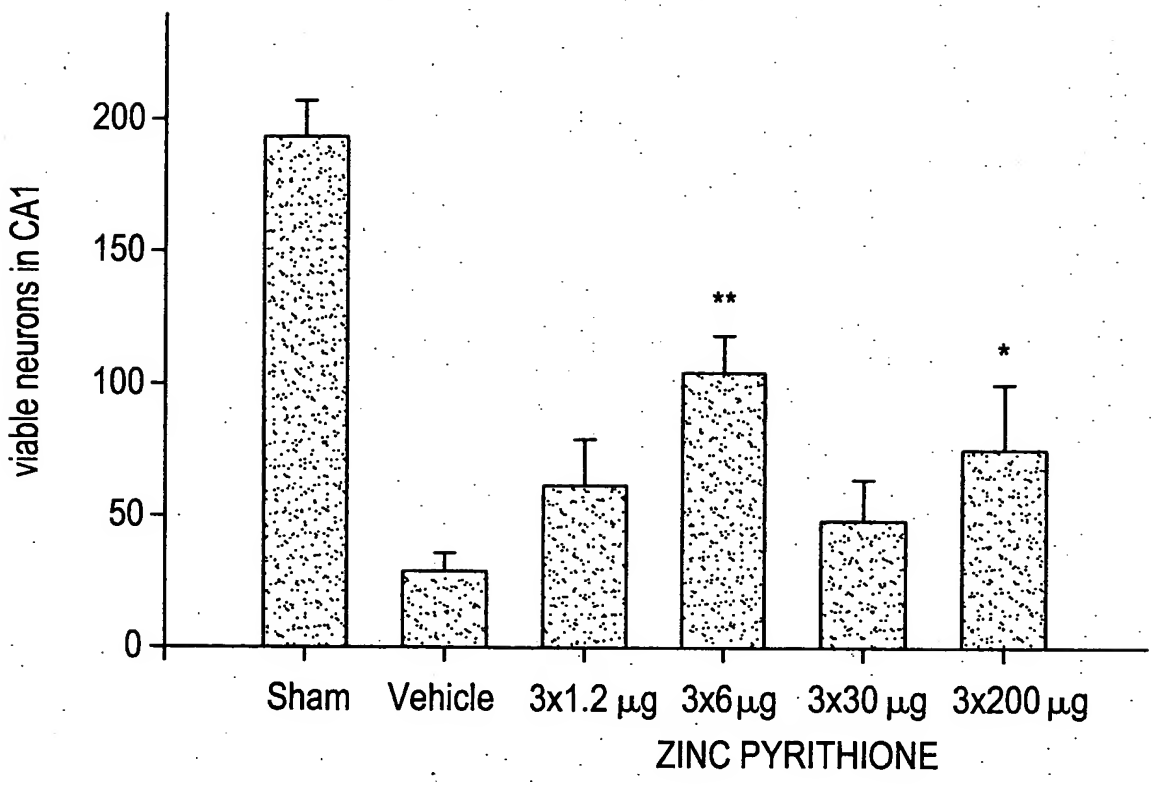

viable neurons in CA1
200
150
100
50
0
**
*
Sham
Vehicle
3x1.2 µg
3x6µg
3x30 µg
3x200 µg
ZINC PYRITHIONE

FIG. 17B

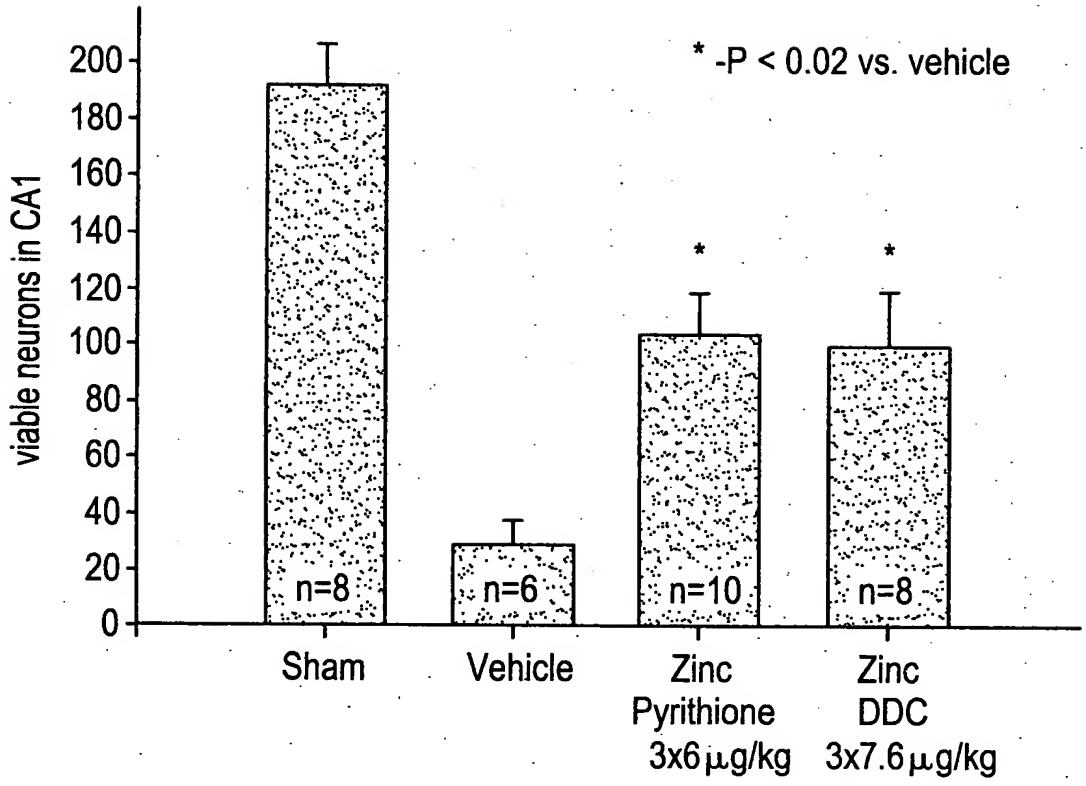

* -P < 0.02 vs. vehicle
viable neurons in CA1
200
180
160
140
120
100
80
60
40
20
0
n=8
n=6
n=10
n=8
*
*
Sham
Vehicle
Zinc Pyrithione 3x6 μg/kg
Zinc DDC 3x7.6 μg/kg

FIG. 18

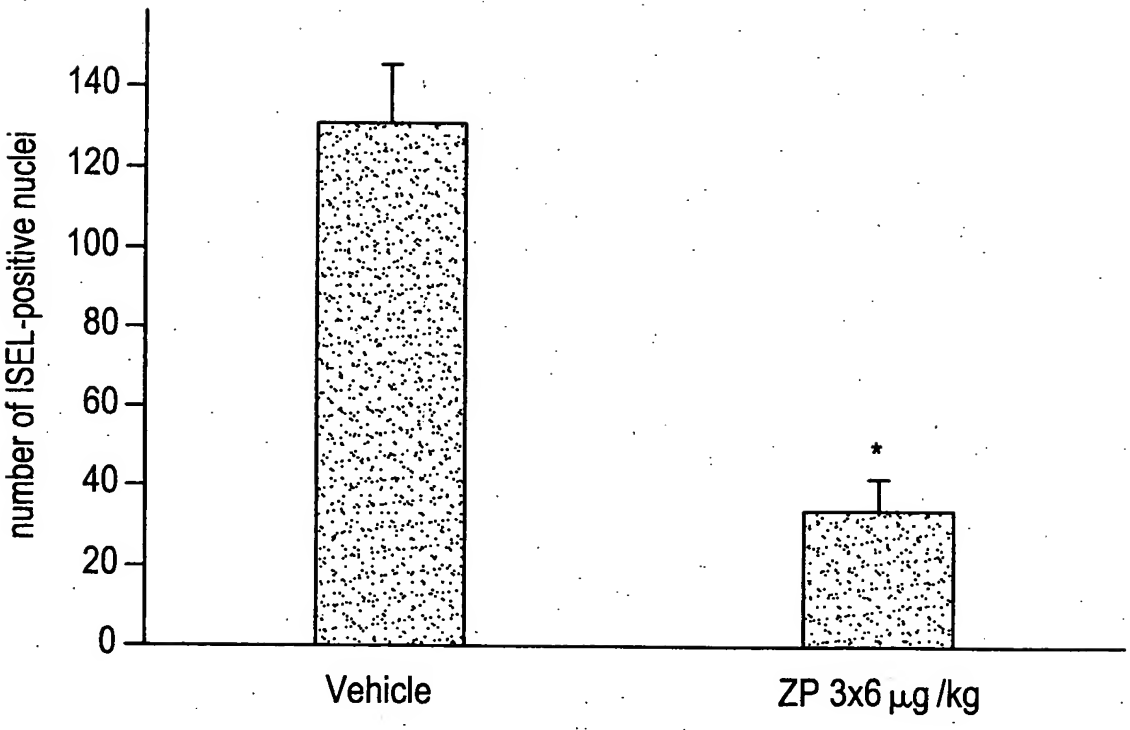

number of ISEL-positive nuclei
140
120
100
80
60
40
20
0
*
Vehicle
ZP 3x6 µg /kg

FIG. 19

FIG. 20A

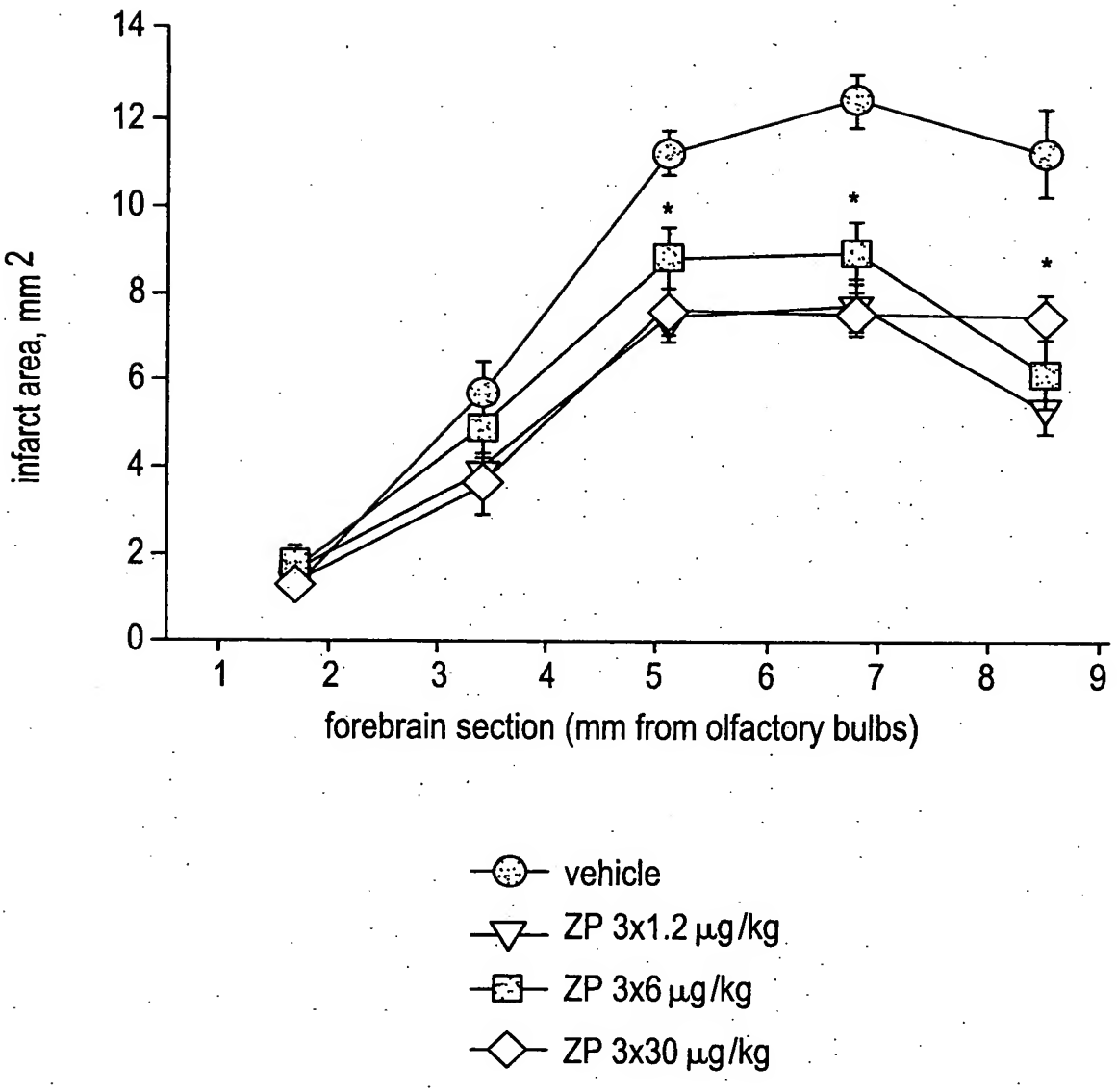

14
12
10
8
6
4
2
0
infarct area, mm 2
1
2
3
4
5
6
7
8
9
forebrain section (mm from olfactory bulbs)
*
*
*
vehicle
ZP 3x1.2 µg/kg
ZP 3x6 µg/kg
ZP 3x30 µg/kg

FIG. 20B

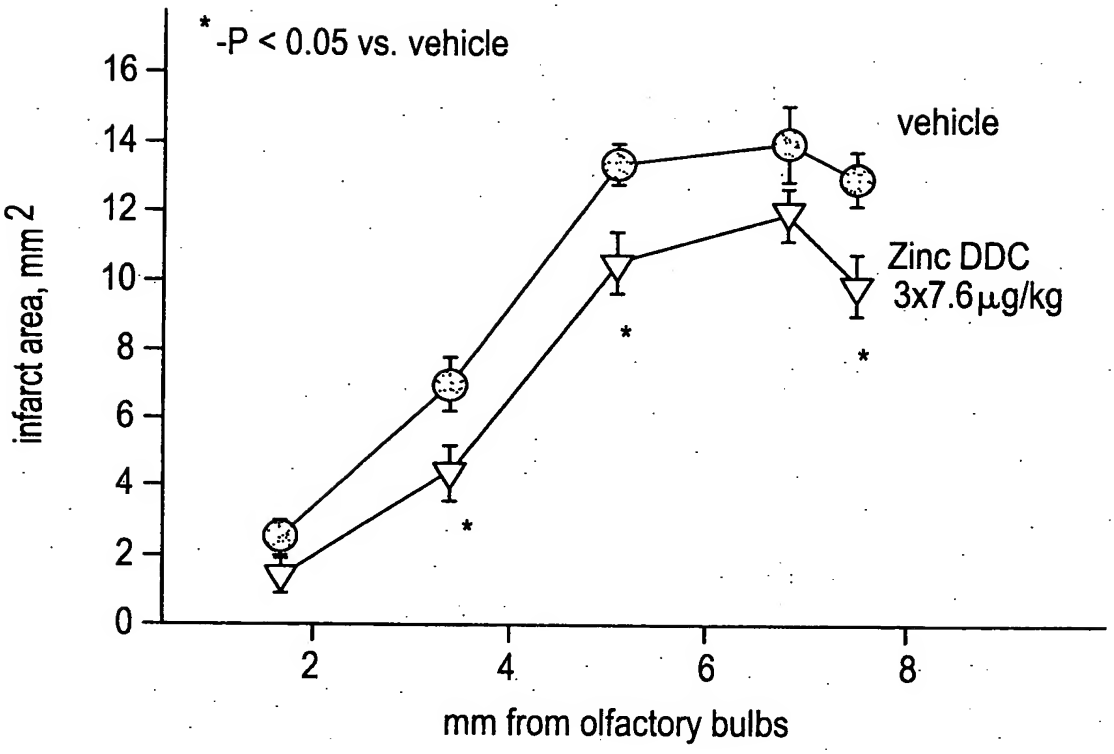

*-P < 0.05 vs. vehicle
vehicle
Zinc DDC
3x7.6µg/kg
infarct area, mm 2
mm from olfactory bulbs
0
2
4
6
8
10
12
14
16
2
4
6
8

FIG. 21A

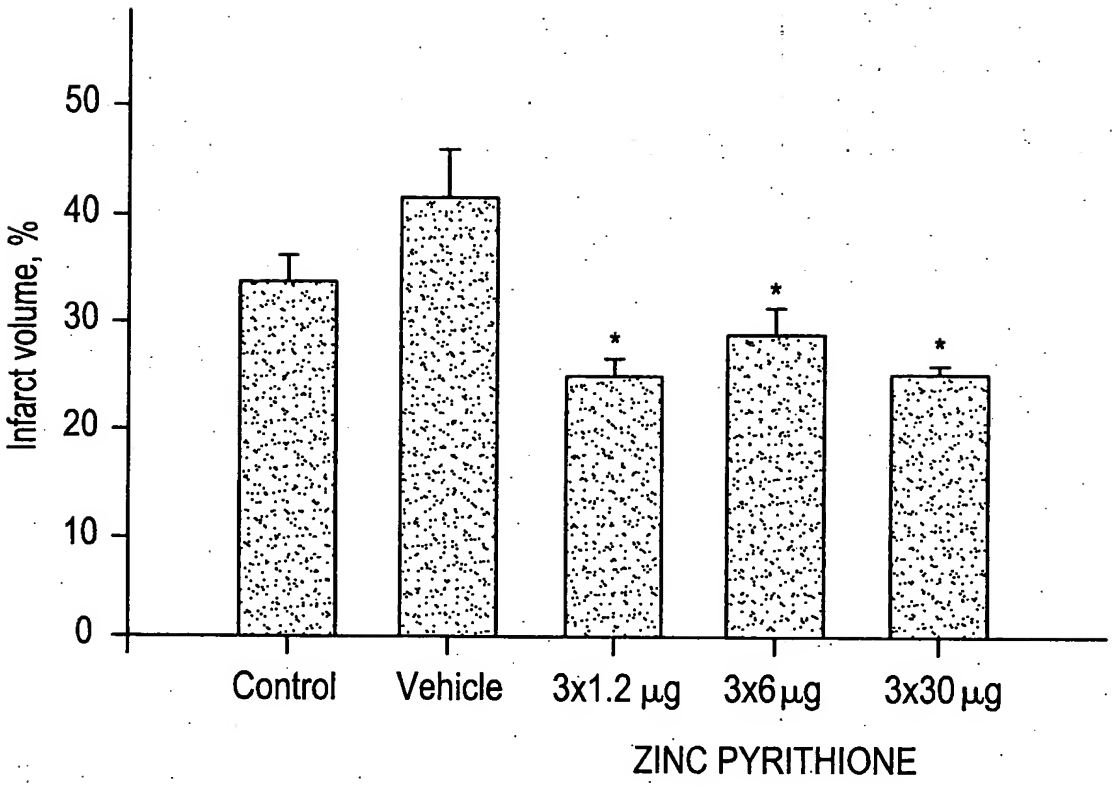

Infarct volume, %
50
40
30
20
10
0
*
*
*
Control
Vehicle
3x1.2 µg
3x6 µg
3x30 µg
ZINC PYRITHIONE

FIG. 21B

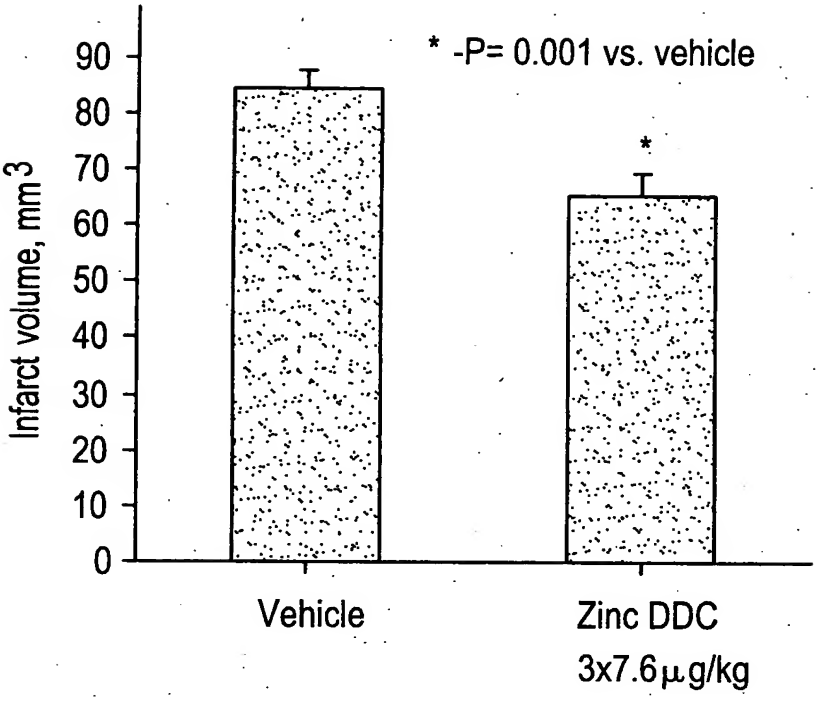


FIG. 21C

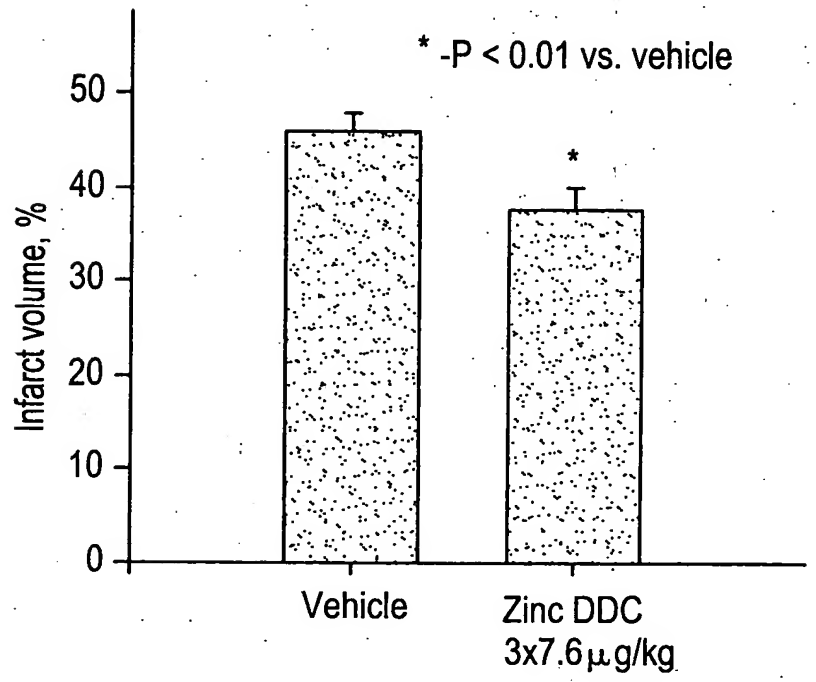
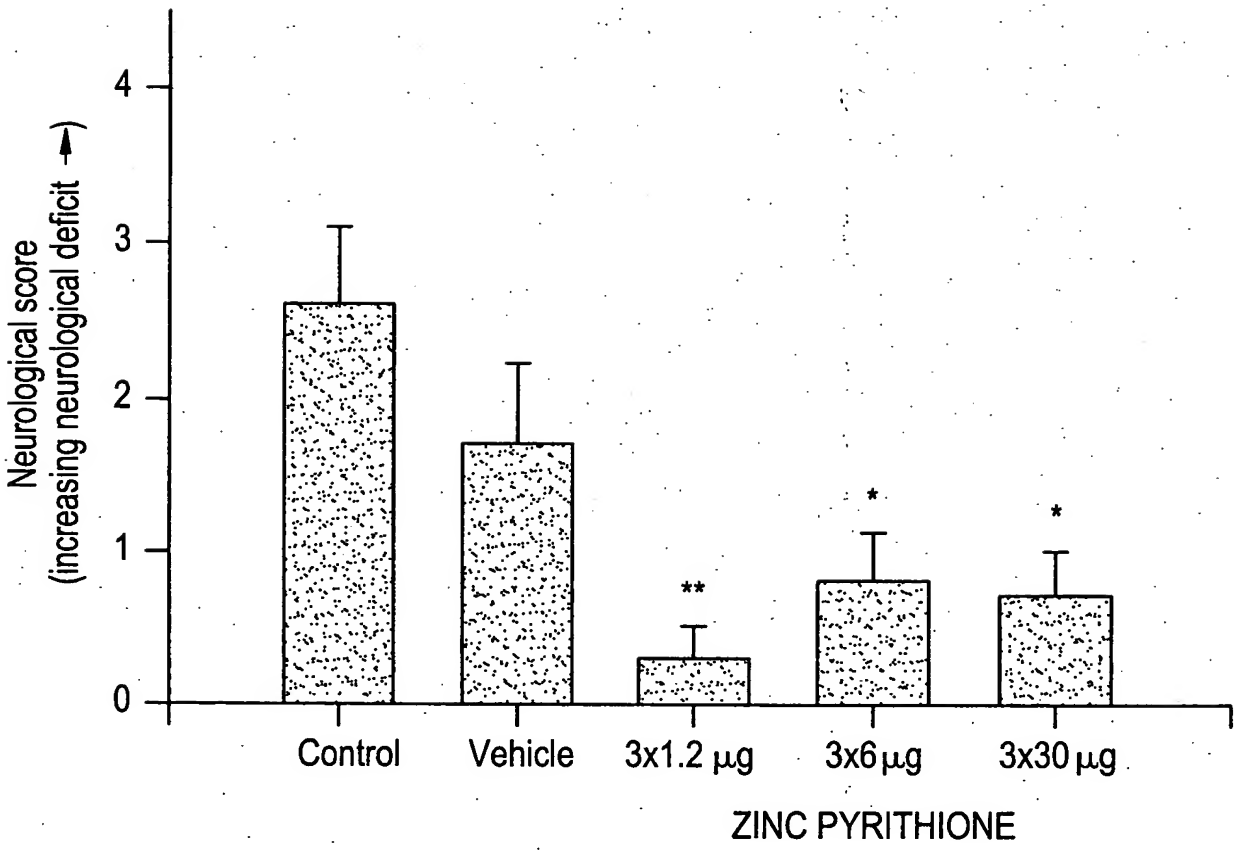


FIG. 22


Neurological score
(increasing neurological deficit →)
4
3
2
1
0
**
*
*
Control
Vehicle
3x1.2 µg
3x6 µg
3x30 µg
ZINC PYRITHIONE